

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) A magnetic memory comprising:
  - a substrate;
  - a lower portion structure provided on or above [[an upside of]] said substrate as a portion of a magnetic element;
  - an upper portion structure provided on [[an upside of]] said lower portion structure of said magnetic element; and
  - a sidewall insulating film provided to surround said upper portion structure of said magnetic element.
2. (Original) The magnetic memory according to claim 1, wherein said magnetic element has a size of an outer circumference of said sidewall insulating film.
3. (Currently Amended) The magnetic memory according to claim 1 [[or 2]], wherein said lower portion structure of said magnetic element comprises:
  - a conductive portion; and
  - a first magnetic film provided on or above [[an upside of]] said conductive portion, and
  - said upper portion structure of said magnetic element comprises:
    - an insulating film;
    - a second magnetic film provided on [[an upside of]] said insulating film.
4. (Currently amended) The magnetic memory according to

claim 1 [[or 2]], wherein said lower portion structure of said magnetic element comprises a conductive portion, and

    said upper portion structure of said magnetic element comprises:

        a first magnetic film;

        an insulating film formed on or above [[an upside of]] said first magnetic film; and

        a second magnetic film provided on or above [[an upside of]] said insulating film.

5.       (Currently amended) The magnetic memory according to claim 1 [[3 or 4]], wherein said upper portion structure of said magnetic element further comprise:

        a conductive film formed on [[an upside of]] said second magnetic film.

6.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 5]], wherein a plane shape of said upper portion structure of said magnetic element is any one of an oval, a cycloid, a rectangle, a hexagon, and a corner quadrangle.

7.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 6]], wherein a distance  $d$  on a plane between an outer circumference of an upper surface of said lower portion structure of said magnetic element and an outer circumference of an upper surface of said upper portion structure of said magnetic element has a relation of  $0.01 \mu\text{m}$  [[m]]  $\leq d \leq 0.2 \mu\text{m}$  [[m]].

8.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 7]], further comprising:

        an interlayer insulating film formed to cover said lower portion structure of said magnetic element, said sidewall insulating film, and said upper portion structure of said

magnetic element,

    said interlayer insulating film has a via-contact connected with [[via-hole on an upside of]] said upper portion structure of said magnetic element, and

    said sidewall insulating film is formed of a material which has an etching selection ratio smaller than said interlayer insulating film.

9.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 7]], further comprising:

    an interlayer insulating film formed to cover said lower portion structure of said magnetic element and said sidewall insulating film, and

    said sidewall insulating film is formed of a material which has a selection ratio in a chemical mechanical polishing or an etching-back smaller than said interlayer insulating film.

10.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 9]], wherein said sidewall insulating film is formed of at least one of metal nitride, metal oxide, and metal carbide.

11.       (Currently amended) The magnetic memory according to claim 1 [[any of claims 1 to 10]], wherein said sidewall insulating film comprises at least one of silicon oxide, silicon nitride, aluminum oxide, and aluminum nitride.

12.       (Currently amended) A method of manufacturing a magnetic memory comprising:

    forming a multi-layer film included in a magnetic element on or above [[an upside of]] a substrate;

    etching said multi-layer film into a predetermined pattern up to a predetermined depth, to form an upper portion structure of said magnetic element;

forming a sidewall insulating film to surround said upper portion structure of said magnetic element;

etching a remaining portion of said multi-layer film by using said sidewall insulating film and said upper portion structure of said magnetic element as a mask to form a lower portion structure of said magnetic element [[as a remaining portion of said magnetic element]].

13. (Currently amended) The method according to claim 12, wherein said forming a multi-layer comprises:

forming [[said lower portion structure of said magnetic element includes]] a conductive film [[portion]] and a first magnetic layer formed on or above [[an upside of]] said conductive film [[portion]] in a portion corresponding to said lower portion structure of said magnetic element; [[, and

said upper portion structure of said magnetic element comprises]] forming an insulating layer and a second magnetic layer formed on or above [[an upside of]] said insulating layer in a portion corresponding to said upper portion structure of said magnetic element.

14. (Currently amended) The method according to claim 12 [[or 13]], wherein said etching said multi-layer film into a predetermined pattern, comprises:

etching said multi-layer film into said predetermined pattern by using a physical etching.

15. (Original) The method according to claim 14, wherein said physical etching is ion milling.

16. (Currently amended) The method according to claim 12 [[any of claims 12 to 15]], wherein said forming a multi-layer comprises:

forming a conductive film in a portion corresponding to

said lower portion structure of said magnetic element; [[comprises a conductive portion,]] and

forming [[said upper portion structure of said magnetic element comprises:]]

a first magnetic layer; an insulating layer formed on or above [[an upside of]] said first magnetic layer; and a second magnetic layer formed on or above [[an upside of]] said insulating layer in a portion corresponding to said upper portion structure of said magnetic element.

17. (Currently amended) The method according to claim 16, wherein each of said etching a remaining portion of said multi-layer film is carried out by using a physical and chemical etching.

18. (Currently amended) The method according to claim 16, wherein said physical and chemical etching is a reactive ion etching.

19. (Currently amended) The method according to claim 12 [[any of claims 12 to 18]], further comprising:

forming an interlayer insulating film to cover said lower portion structure of said magnetic element, said sidewall insulating film, and said upper portion structure of said magnetic element; and

forming a via-hole in said interlayer insulating film so as to be connected with [[on an upside of]] said upper portion structure of said magnetic element by an etching method,

said sidewall insulating film is formed of a material which has an etching selection ratio smaller than said interlayer insulating film.

20. (Currently amended) The method according to claim 12 [[any of claims 12 to 19]], further comprising:

forming an interlayer insulating film to cover said lower portion structure of said magnetic element, said sidewall insulating film, and said upper portion structure of said magnetic element; and

flattening said interlayer insulating film on [[an upside of]] said upper portion structure of said magnetic element by a chemical mechanical polishing method or an etching-back method,

said sidewall insulating film is formed of a material which has a selection ratio in the chemical mechanical polishing method or the etching-back method smaller than said interlayer insulating film.